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DATE MAILED: 01/11/2010

NOTICE OF ALLOWANCE AND FEE(S) DUE

27160 7590 01/11/2010 KATTEN MUCHIN ROSENMAN LLP (C/O PATENT ADMINISTRATOR) 2900 K STREET NW, SUITE 200 WASHINGTON DC 20007-5118 EXAMINER
SOUW, BERNARD E
ART UNIT PAPER NUMBER
2881

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/582,524	04/05/2007	Thomas N. Horsky	211843-00047	1041	
TITLE OF INVENTION: CONTROLLING THE FLOW OF VAPORS SUBLIMATED FROM SOLIDS					

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/12/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	or transmitting the 1880 ig the Patent, advance of nerwise in Block 1, by (a	rders and notification of n a) specifying a new corres	naintenance fees will pondence address; a	Il be mailed to the currer and/or (b) indicating a se	should be completed where nt correspondence address as parate "FEE ADDRESS" for
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use Bi	lock 1 for any change of address)	Note Fee(pape have	e: A certificate of m s) Transmittal. This rs. Each additional its own certificate o	nailing can only be used certificate cannot be used paper, such as an assignn of mailing or transmission	for domestic mailings of the for any other accompanying nent or formal drawing, must
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WASHINGTON	N, DC 20007-5118					(Depositor's name)
						(Signature)
						(Date)
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nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/12/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS			
SOUW, BE	ERNARD E	2881	250-427000			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DATA	inge of Correspondence Indication form and. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (I) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent atto- listed, no name will be THE PATENT (print or typ data will appear on the p IT a substitute for filing an.	3 registered patent rely, e firm (having as a rigent) and the names meys or agents. If no printed.	member a 2s of up to o name is 3	document has been filed for
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4a. The following fee(s) Issue Fee Publication Fee (N Advance Order -	vo small entity discount p		b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo	d. Form PTO-2038	is attached.	e shown above) deficiency, or credit any an extra copy of this form).
- 11	s SMALL ENTITY state	as. See 37 CFR 1.27.	☐ b. Applicant is no long			
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte ites Patent and Trademark	d from anyone other than the Office.	he applicant; a regist	ered attorney or agent; or	the assignee or other party in
Authorized Signature				Date		
Typed or printed name				Registration No		
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	CFR 1.311. The informatis U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 mi idual case. Any con r, U.S. Patent and T D THIS ADDRESS.	e public which is to file (a inutes to complete, includ ments on the amount of rademark Office, U.S. De SEND TO: Commissione	nd by the USPTO to process) ing gathering, preparing, and time you require to complete partment of Commerce, P.O. r for Patents, P.O. Box 1450,

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2900 K STREET WASHINGTON.			2881	_

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
10/582,524	HORSKY ET AL.	
Examiner	Art Unit	
BERNARD F. SOUW	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. ☑ This communication is responsive to 9/3/2009 (Amdt).
- The allowed claim(s) is/are 1 and 28-66.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) I hereto or 2) to Paper No./Mail Date _____
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ______.

 Identifying indicts such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) c each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 12/17 + 11/17 + 5/12 + 3/5/2009

 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other _____.

DETAILED ACTION

Amendment

 The Amendment filed on 09/03/2009 has been entered. The present Office Action is made with all the suggested amendments being fully considered.

Claims 2-27 have been previously cancelled.

No new claim has been added.

Claims 1 and 28-66 are pending in this Office Action.

Information Disclosure Statement

Receipt is acknowledged of information disclosure statement (IDS) submitted on 12/17/2009, 11/17/2009, 05/12/2009 and 03/05/2009. The submissions are in compliance with the provisions of 37 CFR 1.97.

Signed copy of the information disclosure statements are here enclosed.

Double Patenting Rejections Withdrawn

 U.S. Patent Application No. 11/648,365 having been abandoned, the previous Obviousness-Type Double Patenting Rejections of claims 36, 44, 45, 50 and 51 are now withdrawn.

ALLOWANCE

Claims 1 and 28-66 are allowed.

The allowed claims are subsequently renumbered to claims 1-39.

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Art Unit: 2881

Reasons for Allowance

5. Claims 1, 52, 53, 54 and 64 are allowed for reciting a control system for

delivering a controlled flow of vapor sublimated from a solid material to a vacuum

chamber, the vapor delivery system comprising a <u>temperature control system</u> for

maintaining the surfaces of the vapor delivery passage that are exposed to the

sublimed vapor, including the throttle valve, the pressure gauge and the vapor

conduit, at a temperature above the condensation temperature of the solid

material.

6. Claims 28-51 and 55-66 are also allowed for their dependency, either

directly or indirectly, to the previously allowed claims 1, 52, 53, 54 or 64.

7. Any comments considered necessary by applicant must be submitted no

later than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submissions should be clearly labeled

"Comments on Statement of Reasons for Allowance."

Relevant Prior Art

8. This prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

(a) US Patent Application No. 11/648365 (pre-published as USPGPub

2008/0073559) discloses a similar invention teaching the same allowable claim

Application/Control Number: 10/582,524

Art Unit: 2881

limitations that would invoke an Obviousness-type Double Patenting rejection.

However, since the copending US application has been abandoned on

08/27/2009, the Double Patenting rejection is now MOOT.

(b) USPGPub 2004/0175759 issued to Koops et al. and USPAT 6,701,066 issued to Sandhu teach a control system for delivering a controlled flow of vapor sublimated from a solid material to a vacuum chamber, the vapor delivery system comprising a temperature control system for maintaining the vaporizer at a temperature higher than the condensation temperature of the solid material. However, both Koops et al. and Sandhu failed to maintain the <u>surfaces of the delivery passage, in particular the vapor conduit</u>, at a temperature <u>above the condensation temperature</u> of the solid material.

Communications

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw, whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571 272 2293. The central fax phone number for the organization where this application or proceeding is assigned is 571 273 8300 for regular communications as well as for After Final communications.

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Art Unit: 2881

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 5993.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bernard E Souw/ Primary Examiner, Art Unit 2881 12/30/2009